DEPARTMENT OF NATURAL RESOURCES POSITION DESCRIPTION

Working Title: Stormwater Engineer

Classification Title: Water Resources Engineer-Advanced

Work Location: Runoff Management Section – Central Office

<u>Position Summary:</u> This position will implement the Department's Storm Water Permit program, the urban Nonpoint pollution control program, and watershed management activities statewide. This position is a primary engineer responsible for providing technical engineering review and engineering support in the areas of municipal MS4 permits, industrial permits, technical standards, and post-construction storm water management and construction site erosion control in accordance with the Clean Water Act, ch. 283, Wis. Stats., and chs. NR 151 and 216, Wisconsin Administrative Codes.

This position is also responsible for providing engineering review of project applications for Department stormwater management grants and loans, and leading development of performance and technical standards and guidance development. Additional activities related to this position include providing guidance to municipal officials, assisting in applications for grants, reviewing plans for Nonpoint pollution, and approving of these plans. Watershed management activities include implementation of objectives as established in the respective basin plans, including Total Maximum Daily Load (TMDL) implementation plans; participation on appropriate workgroups, such as TMDL sector or statewide policy/implementation teams; and implementation of alternative water quality compliance approaches, such as Adaptive Management and Water Quality Trading.

Scope of Authority: This position is supervised by the Runoff Management Supervisor, Central Office, in the External Services Division, Watershed Management Program. This position is non-supervisory.

Location, Geographic Scope, and Travel Requirements of Position: This position is located at the Central Office in Madison and will have responsibilities throughout the state. This position will require occasional statewide travel and overnight stays for meetings, trainings, or to provide program implementation support, and may require minimal out-of-state travel. Telework may be available.

Time % Goal and Worker Activities

- 40% A. PROVIDE TECHNICAL ENGINEERING EXPERTISE FOR THE URBAN STORM WATER MANAGEMENT AND CONSTRUCTION SITE EROSION CONTROL PROGRAMS.
 - A.1. Respond as the technical expert to questions about best management practices for urban storm water management and construction site erosion control from DNR regional and central office staff, municipal officials and consulting engineering firms.

- A.2. Provide high level technical support to internal and external users, for the models used to predict pollutant loadings to water bodies from urban sources and the hydraulic and hydrologic models used for design of practices.
- A.3. Prepare technical papers and conduct informational and training presentations as the technical expert to describe urban storm water and construction site erosion control problems and best management practices in Wisconsin to state, regional and national audiences.
- A.4. Provide assistance and back-up for the liaison to the Office of Energy, by reviewing plans and issuing coverage under the WPDES construction site general permit for Office of Energy project when needed.

40% B. PARTICIPATE IN ESTABLISHING STATEWIDE POLICIES AND TECHNICAL STANDARDS FOR URBAN STORM WATER MANAGEMENT AND CONSTRUCTION SITE EROSION CONTROL.

- B.1. Lead or serve on technical standard development teams through the state and federal interagency Standards Oversight Council. Lead or serve on other external or internal work groups as necessary to identify and develop state policies and technical standards for urban storm water management and construction site erosion control.
- B.2. Lead the effort of drafting portions of administrative rules necessary to implement the urban storm water management and construction site erosion control requirements in state law. This includes drafting administrative code language, writing necessary environmental impact statements and assessments and developing fiscal notes.
- B.3. Provide engineering expertise as the statewide expert in the development of policies, technical standards and administrative rules required to comply with federal storm water discharge and construction site erosion control regulations.
- B.4. Serve on the internal storm water engineering team to provide technical expertise and act as a fully participating team member of this self-directed team.

15% C. SUPPORT OTHER RUNOFF PROGRAMS AND WATER DIVISION PROGRAMS AS NEEDED

- C.1. Provide engineering reviews and approvals for projects submitted under the grant or loan programs administered by the department, following guidelines developed by the funding program. Provide technical expertise to issues related to best management practices and appropriate grant deliverables. Confirm consistency with stormwater program permitting requirements.
- C.2. Provide technical support to the agency representative on issues associated with additive use for storm water applications.
- C.3. Provide technical expertise by identifying issues with implementation of the storm water program for TMDLs and programs associated with

- implementation of TMDLs such as Adaptive Management and Water Quality Trading.
- C.4. Lead database management and GIS application efforts including hiring and managing contractors and acting as a liaison to the agency GIS program where applicable.

5% D. OTHER DUTIES

- D.1. Review and keep abreast of changes in knowledge and practices of position-related activities in responsibilities.
- D.2. Follow all general and position-related safety requirements.
- D.3. Perform other position-related duties as assigned.

Special Requirements

- Must be eligible to register as a Professional Engineer, possess a degree from a recognized college or university with a degree in a related engineering field, or meet other eligibility requirements determined by DSPS.
- Must meet the requirements to operate a state vehicle, including the ability to obtain and maintain a valid WI driver's license.

Knowledge Skills and Abilities

- 1. Experience with urban best management and construction site erosion control practices and their application to achieve pollutant reduction goals.
- 2. Experience with engineering principles related to the design of structural and non-structural urban best management and construction site erosion control practices.
- 3. Skill in the use of Personal computers with an emphasis on use of the Microsoft Office Suite (i.e., MS-Word, MS-Excel, MS-Project, MS-PowerPoint).
- 4. Knowledge of Federal Clean Water Act requirements for Total Maximum Daily Load development and management of storm water sources of pollution.
- 5. Ability to interpret and apply State and federal laws and Wisconsin Administrative Rules (Chapters NR 102, 104, 105, 106, 120, 152,153, 154, 216, 243 and 207) pertaining to surface water quality standards.
- 6. Skill in the use of Arc Info, Arc View and other GIS computer technology.
- 7. Ability to work effectively in teams of various sizes.
- 8. Knowledge of Wisconsin Pollution Discharge Elimination System program for the management of stormwater or wastewater from point sources.
- 9. Knowledge of Wisconsin's urban and construction site stormwater management program as it relates to the development of TMDLs.
- 10. Knowledge of the DNR's urban grant program, including nonpoint source program objectives and procedures.
- 11. Skill in data entry, retrieval, and management using databases.
- 12. Project management experience in a lead role with direct experience in initiating and managing projects with minimal supervision.
- 13. Knowledge of wetlands, including hydrology and plants.

- 14. Experience with runoff management models (e.g., WinSLAMM, P8) and hydraulic and hydrologic models (e.g., Hydrocad).
- 15. Skill in oral and written communication.

Physical Requirements and Environmental Factors:

Strength requirements: Regular physical work for conducting site inspections and compliance determination, including walking in various terrain, carrying field equipment, and digging soil pits. Occasional sedentary office work (exerting up to 10 pounds of force occasionally and/or a negligible amount of force frequently).

Physically: This position will spend approximately 75% of time indoors in an office setting.

Environmental Factors: This position will on occasion spend more than one hour outdoors in varying weather conditions.

Equipment Used: Office equipment including telephone, computer hardware and software. Field equipment for site reviews, including digital camera, GPS unit, soil boring instruments and shovels.

Telework Evaluation: Telework may be available for this position upon successful completion of the probationary period.